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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,978	10/15/2003	Jeffrey L. Elkins	ELK03 P-301	7105
277	7590	05/08/2006	EXAMINER	
PRICE HENEVELD COOPER DEWITT & LITTON, LLP 695 KENMOOR, S.E. P O BOX 2567 GRAND RAPIDS, MI 49501			SWEET, THOMAS	
			ART UNIT	PAPER NUMBER
			3738	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,978

Applicant(s)

ELKINS, JEFFREY L.

Examiner

Thomas J. Sweet

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/15/03 & 1/6/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on 09/02/2005 is acknowledged. The traversal is on the ground(s) that the claims have been amended to include the particulars of the subcombination in the combination. This is found persuasive because the combination as amended is not separable from the subcombination.

Claim Objections

Claims 3 and 9 are objected to because of the following informalities: Claims 3 and 9 each recites the limitation "the insole" in line 1. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3-4, 6, 9-10 and 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Biedermann (US 6423098). Biedermann discloses a foot-operated controller (fig. 1) comprising: a substrate (the cover of 5) having a plurality of pressure sensors (s4-s7) mounted at selected location on the substrate to facilitate control of a controllable device (prosthesis) by application of pressure from selected parts of a foot to the sensors (col 2, lines 24-32); and a microprocessor (col 2, lines 36-42) for receiving input from the sensors and converting the sensor inputs into commands for the controllable device.

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With regard to claims 3 and 9, the sensors are located on (when darning a shoe either held in contact with the insole of a shoe) or within the insole of a shoe (the covering of foot 5 can be categorized as an insole since it is receivable in a shoe).

With regard to claims 4 and 10, the microprocessor is hard-wired to the controllable device (as schematically shown in the fig.).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 11 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Biedermann. Biedermann discloses a foot-operated controller as discussed above including a microprocessor located on the substrate (the hard-wired circuit). In as far as the microprocessor being located on the same support, Biedermann remains silent only showing the hard-wiring schematic and never mentioning the mounting. Applicant has not disclosed that mounting the sensors and microprocessor on the same support solves any stated problem or is for any particular purpose. Moreover, it appears that the foot-operated controller would perform equally well with the sensors and microprocessor mounted on the same support. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have mounted the microprocessor on the support (the cover of 5) of Biedermann with the sensors because such a modification would have been

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considered mere design consideration which fails to patentably distinguish over the prior art of Biedermann.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biedermann. Biedermann discloses a foot-operated controller as discussed above. However, Biedermann does not disclose a radio transmitter for sending the commands for controllable device. It is well known in the art of control devices to use a radio transmitter for the purpose of sending the communicating commands between components. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a radio transmitter for the hard-wiring of Biedermann in order to communicate commands between components. Such a modification amounts to mere substitution of one functionally equivalent communication system for another within the art of control devices.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alderson (US 2640994) in view of Biedermann. Alderson discloses a foot-operated controller (figs. 31 or 36) comprising: a substrate (figs. 23,24 and 35) having a plurality of pressure sensors (576, 578, etc...) mounted at selected location on the substrate (as shown) to facilitate control of a controllable device (prosthetic hand/arm) by application of pressure from selected parts of a foot to the sensors; and a control system (relay pouch) for receiving input from the sensors and converting the sensor inputs into commands for the controllable device. However, Alderson does not disclose using a microprocessor as the control system. It is well known in the art of prosthetics to use a microprocessor as a control system for a prosthesis such as demonstrated by Biedermann. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a microprocessor such as taught by Biedermann for the control

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system of Alderson in order to control the prosthetic hand/arm. Such a modification amounts to mere substitution of one functionally equivalent control system for another within the art of prosthetics.

With regard to claims 2 and 8, although, neither Alderson or Biedermann do not disclose a radio transmitter for sending the commands for controllable device. It is well known in the art of control devices to use a radio transmitter for the purpose of sending the communicating commands between components. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a radio transmitter for the hard-wiring of Alderson as modified in order to communicate commands between components. Such a modification amounts to mere substitution of one functionally equivalent communication system for another within the art of control devices.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Numerous references are listed on the PTO-892 form.

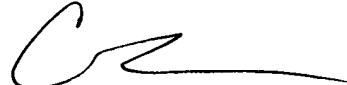
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Sweet whose telephone number is 571-272-4761. The examiner can normally be reached on 6:30 am - 5:00pm, M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine M. McDermott can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tjs



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